|  | Application No.   | Applicant(s)   | AL                          |
|--|---|--|-----------------------------|
|  |   |  |                             |
| Notice of Allowability   | 10/614,787<br>Examiner  | QIU ET AL. Art Unit  |                             |
|  | Examiner  |  |                             |
|  | Hoon Song   | 2882   | <u> </u>                    |
| The MAILING DATE of this communication claims being allowable, PROSECUTION ON THE MERIT rewith (or previously mailed), a Notice of Allowance (PTOLOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT the Office or upon petition by the applicant. See 37 CFR  | S IS (OR REMAINS) CLOSED i<br>85) or other appropriate comm<br>NT RIGHTS. This application is | in this application. If not inclu-<br>nunication will be mailed in du- | ded<br>e course. <b>THI</b> |
| This communication is responsive to <u>response filed or</u>   | <u>n 4/15/2005</u> .  |  |                             |
| ☑ The allowed claim(s) is/are <u>12-23,25-53 and 55-65</u> .   | •   |  | ν.                          |
| igotimes The drawings filed on <u>09 July 2003</u> are accepted by the   | ne Examiner.  |  | J                           |
| ☐ Acknowledgment is made of a claim for foreign prior a) ☐ All b) ☐ Some* c) ☐ None of the:  |   | or (f).  |                             |
| Certified copies of the priority documents   |   | <b>A</b> I   |                             |
| 2. Certified copies of the priority documents  |   |  | nation from th              |
| 3. Copies of the certified copies of the priori  | ty documents have been receive  | ed in this national stage applic                                       | Jacon Hom u                 |
| International Bureau (PCT Rule 17.2(a)).   |   |  |                             |
| * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING Donoted below. Failure to timely comply will result in ABAND THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   | ATE" of this communication to fill ONMENT of this application.                                | le a reply complying with the r  | requirements                |
| A SUBSTITUTE OATH OR DECLARATION must be INFORMAL PATENT APPLICATION (PTO-152) which   | submitted. Note the attached EX<br>h gives reason(s) why the oath                             | (AMINER'S AMENDMENT or<br>or declaration is deficient.                 | NOTICE OF                   |
| CORRECTED DRAWINGS (as "replacement sheets"  |   |  |                             |
| (a) ☐ including changes required by the Notice of Draft  | tsperson's Patent Drawing Revie   | ew ( PTO-948) attached   |                             |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _   |   |  |                             |
| (b) including changes required by the attached Exan Paper No./Mail Date  | niner's Amendment / Comment o   | or in the Office action of   |                             |
| Identifying indicia such as the application number (see 37 (each sheet. Replacement sheet(s) should be labeled as such   | CFR 1.84(c)) should be written on<br>th in the header according to 37 C                       | the drawings in the front (not t<br>FR 1.121(d).                       | he back) of                 |
| . DEPOSIT OF and/or INFORMATION about the attached Examiner's comment regarding REQUIREM   | deposit of BIOLOGICAL MA  | TERIAL must be submitted   | I. Note the                 |
|  |   | ·<br>•   |                             |
| ttachment(s)  Notice of References Cited (PTO-892)   | 5. ☐ Notice of  | Informal Patent Application (F   | PTO-152)                    |
| Notice of References Cited (170-002)  Notice of Draftperson's Patent Drawing Review (PTO-  | .948) 6. 🗌 Interview  | Summary (PTO-413),   | •                           |
| management with the company of the c | Paper No  | ./Mail Date<br>'s Amendment/Comment                                    |                             |
| ☑ Information Disclosure Statements (PTO-1449 or PTC Paper No./Mail Date 4/15/2005   |   |  | Mayarra                     |
| Examiner's Comment Regarding Requirement for Dep   | · · · · · · · · · · · · · · · · · · ·   | 's Statement of Reasons for A  | Allowance                   |
| of Biological Material   | 9. 🗌 Other  | ·  |                             |
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## **DETAILED ACTION**

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffrey G. Killian on 4/29/2005.

The application has been amended as follows:

In claim 34, at line 8, delete "and";

at line 9, after "cathodes;" insert -- and --;

at line 10, delete "wherein" and insert --a controlling unit for operating--;

at line 10, delete "is operable";

at line 10, delete "can be" and insert -- are --.

Cancel claim 39.

## Allowable Subject Matter

Claims 12-23, 25-53 and 55-65 are allowed over prior art.

The following is an examiner's statement of reasons for allowance:

Regarding claims 12-23 and 25-33, the prior art fails to teach a multi-beam x-ray generating device having a stationary filed-emission cathode with a plurality of individually controllable electron-emitting pixels, wherein the plurality of pixels have a first and second different emission area as claimed in independent claim 12.

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Regarding claims 34-42, the prior art fails to teach an x-ray generating device having a gate electrode with a plurality of different sized openings and a controlling unit for operating the openings to bring at least one beam of electrons as claimed in independent claim 34.

Regarding claims 43-53 and 55-56, the prior art fails to teach a method of scanning an object by providing a stationary field-emission cathode with a plurality of individually controllable electron-emitting pixels, wherein the plurality of pixels have a first and second different emission area as claimed in independent claim 43.

Regarding claims 57-65, the prior art fails to teach a method of scanning an object with x-rays by disposing a gate electrod with a plurality of openings having different sizes and manipulating the gate to being at least one beam of electrons as claimed in independent claim 57.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494.

The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**HKS** 

fl29/08

SUPERVISORY PATENT EXAMINER